SPECIAL NOTICES

NEPENTHES CUTTINGS -- There is much demand for these and each spring for the past few, Joe Mazrimas and Don Schnell have pooled their prunings (with Joe handling the collation of requests and actual packaging and mailing) and sent them free to those whose requests arrive first, the only reimbursement being postage. The same is planned for the spring of 1977 and requests for cuttings should be made now. The requests will be dated in order of receipt and filled until cuttings supply is exhausted. Send all requests to: J.A. MAZRIMAS, 329 Helen Way, Livermore, CA 94550; do NOT send requests to Don Schnell since this will create confusion, duplication, etc. In your letter to Joe, send along information on what kinds of conditions you can provide for the plants (se we know they will have a good home) unless you and your growing conditions are known. Also, send a list of species of Nepenthes being grown and species desired: the first will prevent duplication, the latter will help us to select plants for you, but final selection will be up to Joe depending on material. You may not receive what you request, but you will not receive duplications. Finally, due to strict import and inspection certificate restrictions, the only foreign countries to which we can send these cuttings will be Great Britain and continental Europe. (Canada, Australia, New Zealand excluded.) Preference will be given to those who have not made requests in previous years. All of this is an attempt to effectively and rapidly spread Nepenthes among growers at no cost except postage. So, if you are interested, get your letter off to Joe today. Cuttings will be made sometime in April and mailed out shortly thereafter.

CURRENT LITERATURE

Adams, R.M. and C. Barton, 1976. The flesh eaters: <u>Sarracenia purpurea</u>, the northern pitcher plant. Garden Journal of NYBG 26(5): 154-157.

A good popular article discussing <u>S. purpurea</u> and its culture. Four fine photographs.

Bradshaw, W. E.: Geography of photoperiodic response in diapausing mosquito. Nature 262, 384-385 1976.

The author studied the photoperiodic control of dormancy in the pitcher-plant mosquito, <u>Wyeomyia smithii</u>, and quantified the relative effects of altitude and latitude on the photoperiodic response of an organism. This mosquito confines its breeding site to the water-filled leaves of a single plant species, <u>Sarracenia purpurea</u>. The larvae overwinter in the pitchers in dormancy and long days promote further development.

Case, F. W. and R. B. Case, 1976. The <u>Sarracenia rubra</u> complex. Rhodora 78:270-325.

This very long paper (at times self-contradictory and repetitious) presents one viewpoint of the "rubra variation" problem, summarized as follows: plants of eastern coastal plain and central Florida panhandle--S. rubra (the author does not believe the Florida plants are genetically different); plants of western Carolinas--re-elevated to species, S. jonesii; plants of central Alabama--S. alabamensis ssp. alabamensis; plants of southern Alabama--S. alabamensis ssp. wherryi. Serious students of Sarracenia must read the paper in its entirety since such a summary as this cannot present nuances of the concepts proposed. (At least one other paper on this subject is forthcoming in about a year, given journal lag).

Engloff, F.: New and Noteworthy species of Swiss flora. Bull. Soc. Bot. Suisse 84(4): 333-342 1975 IN GERMAN

The author found <u>Utricularia ochroleucra</u> Hartm., <u>Sarracenia purpurea</u> L. as part of a new plant record for <u>Switzerland</u>.

Johnson, Peter H. 1976. Carnivorous Plants. House Plants and Porch Gardens Magazine 1:36-47.

A good general article featuring mainly American plants and including growing hints.

There are fifteen full color photos by Jerome Wexler and Don Schnell, and several nice line drawings.

Lea, H.: A muscle contracting substance from a plant's closing fly-trap. Planta (Berl.) 129(1): 39-41 1976

A substance called lysophosphatidic acid was isolated from <u>Dionaea m.</u> traps which have been touched. This substance can contract frog muscle when applied to the isolated tissue. It is thought that the acid activates an enzyme, phospholipase D, which then alters the physiological properties of membranes.

Milne, L. & M.: Living Plants of the World, Chapter 10, "The Meat Eaters." Random House, Inc. N.Y. 1967.

Moar, N. T. and R. Mason: Discovery of <u>Utricularia protrusa</u> Hook., f. near Westport,
South Island, New Zealand, N.Z.J.Bot. 13(4): 803-805 1975
The floating bladderwort <u>U. protrusa</u> was found in roadside shallow pools which extends species range southward by 550 Km.

Panin, M. S. & G. Grishin: Sulfur content in some plants of the Semipalatinsk oblast of the Kazakh SSR. Rastit. Resur. 11(4): 473-483 1975

Utricularia vulgaris was found to contain a relatively high sulfur content in comparison with 60 spp. of other plants.

Robins, R. J.: The nature of the stimuli causing digestive juice secretion in $\frac{\text{Dionaea}}{\text{muscipula}}$ Ellis (Venus's Flytrap). Planta (Berl) 128(3): 263-265 1976

The secretions of fluid and protein are studied as a function of time when both are stimulated by various nitrogenous molecules. Using a new method for collecting the juice, the author found significant differences in response to various stimuli.

Somha, K.: Pollen morphology of the Japanese species of <u>Utricularia</u> L. and <u>Pinguicula</u> L. with notes on fossil pollen of <u>Utricularia</u> from Japan. J. JPN. Bot. 50(6): 164-179; 50(7): 193-208 1975

Pollen types were related to subdivisions recognized in the family of Lentibulariacea and generally support the De Candolle system. Four species have grains which are tricolporate and the rest are stephanocolporate (ll species). Fossil grains are comparable with those of $\underline{\text{U}}$. $\underline{\text{vulgaris}}$ followed by $\underline{\text{U}}$. $\underline{\text{dimorphantha}}$, $\underline{\text{minor}}$, $\underline{\text{aurea}}$, $\underline{\text{gibba}}$, and $\underline{\text{intermedia}}$ in a proposed $\underline{\text{phylogenetic}}$ outline. $\underline{\text{Pinguicula ramosa}}$ and $\underline{\text{P}}$. $\underline{\text{vulgaris}}$ both have stephanocolporate pollen grains.

(The author of the following paper would like us to inform our readers that she carried out these experiments at the age of eighteen and won first prize in a science competition ["Jugendforscht"] for young people interested in science.)

Weilbrenner, Inge: Vegetative Vermehrung und Wuchsstoffhaushalt bei dem Rundblättrigen Sonnentau (<u>Drosera rotundifolia</u>)*, <u>Mitteilungen der Pollichia</u>, III. Reihe, 21. Band, 1974, pp. 46-67.

This article deals with vegetative reproduction in <u>Drosera rotundifolia</u> and devotes special attention to the role played by the auxin indole acetic acid (IAA) in suppressing such reproduction. The author shows that for new plants to arise asexually, two basic criteria must be met: (1) Suspension of apical dominance in the parent plant through interruption of IAA translocation from the shoot apex, and (2) A wound stimulus, induced either by mechanical injury or by agents of decay such as bacteria or fungi. The author also presents experimental evidence that in <u>D. rotundifolia</u> the movement of IAA is possible in either direction along stem or petiole, an exception to the one-way flow of IAA in other plants. (Includes bibliography)

*Vegetative development and reproduction in the roundleaf sundew (D. rotundifolia).

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